L	Hits	Search Text	DB	Time stamp
Number				
1	206	(528/201).CCLS.	USPAT;	2003/04/21
			US-PGPUB	11:07
2	105	(528/200).CCLS.	USPAT;	2003/04/21
_			US-PGPUB	11:08
3		_(_(528/200)CCLS)not-((528/201)-CCLS-)	USPAT;	2003/04/21
			US-PGPUB	11:36
4	641	((528/370) or (528/371)).CCLS.	USPAT;	2003/04/21
_			US-PGPUB	11:36
5	577	(((528/370) or (528/371)).CCLS.) not	USPAT;	2003/04/21
Ĭ	• , ,	(((528/201).CCLS.) or ((528/200).CCLS.))	US-PGPUB	11:37
6	248	((((528/370) or (528/371)).CCLS.) not	USPAT;	2003/04/21
		(((528/201).CCLS.) or ((528/200).CCLS.)))	US-PGPUB	11:37
		and polycarbonate\$		

WEST

End of Result Set

____Generate-Collection—— -Print-

L3: Entry 1 of 1

File: DWPI

May 21, 1979

DERWENT-ACC-NO: 1979-48140B

DERWENT-WEEK: 197926

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TITLE: Ester-exchanged carbonate prodn. - by reacting in the presence of a tin alkoxide

PRIORITY-DATA: 1977JP-0128388 (October 26, 1977)

PATENT-FAMILY:

PUB-NO PUB-DATE

LANGUAGE

PAGES MAIN-IPC

JP 54063023 A

May 21, 1979

000

JP 81040708 B

September 22, 1981

000

INT-CL (IPC): B01J 31/12; C07C 68/06; C07C 69/96; C08G 63/62

ABSTRACTED-PUB-NO: JP 54063023A

BASIC-ABSTRACT:

Method comprises subjecting hydroxy cpds. and carbonates to ester exchange reaction in the presence of tin alkoxides of formula R3-1Sn(OR1)1+1 (I), (where R is hydrocarbon residue, R1 is hydrocarbon residue, 1 is 0-2; 2 R1's may stand for one alkylene gp.). (I) include, e.g. tributylmethoxy tin, triethylethoxy tin, dibutyldiethoxy tin.

Neutral carbonates are produced easily in high yield rates from cheap hydroxy cpds. and carbonates.

(FILE 'HOME' ENTERED AT 10:21:49 ON 21 APR 2003)

L1	FILE 'CA' ENTERED AT 10:22:03 ON 21 APR 2003 1 S EP1065231/PN	
L2 L3 L4 L5 L6 L7 L8 L9 L10	FILE 'REGISTRY' ENTERED AT 10:22:55 ON 21 APR 2003 1 S 316189-07-8/RN 2097 S C17H2602/MF 8 S L3 AND DIMETHANOL? 131 S L3 AND METHANOL? 123 S L5 NOT L4 3 S L5 AND DODECA? 11 S 112708-21-1/CRN OR 76114-63-1/CRN 5 S L8 AND PC/PCT 5 S L8 AND 102-09-0/CRN 5 S L9 OR L10	
L12	FILE 'CA' ENTERED AT 10:30:05 ON 21 APR 2003 2 S L11	

```
AN----134:87-914--CA ----------
     Production method of tricyclopentadiene
ΤI
IN
    Nakamura, Kenichi; Fujii, Takashi
PΑ
    Mitsubishi Gas Chemical Co., Ltd., Japan
SO
    Jpn. Kokai Tokkyo Koho, 3 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
     ICM C07C002-40
IC
     ICS C07C013-28
     45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
     Section cross-reference(s): 24, 35
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                     ____
                           _____
                                           _____
     ______
                                           JP 1999-188689 19990702
PΙ
     JP 2001010983
                      A2
                            20010116
PRAI JP 1999-188689
                           19990702
     Tricyclopentadiene is synthesized from cyclopentadiene and/or
     dicyclopentadiene, preferably contg. conjugated diene impurities
     .ltoreq.1500 ppm, with maintaining the conversion ratios of
     cyclopentadiene and/or dicyclopentadiene .ltoreq.50%. Thus,
     tricyclopentadiene was synthesized using cyclopentadiene and/or
     dicyclopentadiene contq. conjugated diene impurities 30 ppm.
     Tricyclopentadiene underwent hydroformylation and hydrogenation reactions
     to give pentacyclopentadecanedimethanol, which was polymd. with bisphenol
    A and di-Ph carbonate to give a polycarbonate.
st
     tricyclopentadiene prepn polycarbonate monomer intermediate
IT
     Polycarbonates, preparation
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (prepn. of tricyclopentadiene and its diol deriv. for polycarbonate
        prepn.)
IT
     7158-25-0P, Tricyclopentadiene
                                    36806-65-2P, Tricyclopentadiene
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);
RACT
     (Reactant or reagent)
        (prepn. of tricyclopentadiene)
IT
     317367-90-1P
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (prepn. of tricyclopentadiene and its diol deriv. for polycarbonate
       prepn.)
                  112708-21-1P
     76114-63-1P
IT
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);
RACT
     (Reactant or reagent)
        (prepn. of tricyclopentadiene and its diol deriv. for polycarbonate
        prepn.)
     77-73-6, Dicyclopentadiene 542-92-7, Cyclopentadiene, reactions
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant; prepn. of tricyclopentadiene)
```

L12 ANSWER 1 OF 2 CA COPYRIGHT 2003 ACS

L4 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS

RN 112708-21-1 REGISTRY

CN - 1,4:5,8-Dimethano-1H-fluorenedimethanol, dodecahydro- (9CI) (CA INDEX NAME)

MF C17 H26 O2

CI IDS, COM

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

9 REFERENCES IN FILE CA (1962 TO DATE)

5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L4 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS

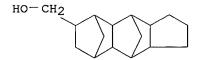
RN 76114-63-1 REGISTRY

CN 4,9:5,8-Dimethano-1H-benz[f]indene-6,?-dimethanol, dodeçahydro-(9CI) (CA INDEX NAME)

MF C17 H26 O2

CI IDS, COM

LC STN Files: CA, CAPLUS, USPATFULL



15 REFERENCES IN FILE CA (1962 TO DATE)

8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

15 REFERENCES IN FILE CAPLUS (1962 TO DATE)

```
ANSWER 1 OF 1 CA COPYRIGHT 2003 ACS
L1
Cycloaliphatic copolycarbonates, their production, and use
ΤI
     Fujimori, Takayasu; Nakamura, Kenichi
IN
     Mitsubishi Gas Chemical Co., Inc., Japan
PΑ
SO
     Eur. Pat. Appl., 10 pp.
     CODEN: EPXXDW
DT
     Patent
LΑ
     English
IC
     ICM C08G064-02
     ICS C08G064-30
     35-5 (Chemistry of Synthetic High Polymers)
CC
     Section cross-reference(s): 38
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ____
                           -----
                                          -----
     ______
     EP 1065231
                     A2
                           20010103
                                          EP 2000-113155
                                                          20000629 <--
PΤ
     EP 1065231
                     A3
                           20011004
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                   A2
     JP 2001011168
                           20010116
                                          JP 1999-188690
                                                          19990702
     JP 2001011169
                      A2
                           20010116
                                          JP 1999-188691
                                                          19990702
                      A2
     JP 2001011165
                           20010116
                                          JP 1999-188692
                                                          19990702
     JP 2001011166
                      A2 20010116
                                          JP 1999-188693
                                                          19990702
                      B1 20020219
                                          US 2000-605971
                                                          20000629
     US 6348559
PRAI JP 1999-188690
                      Α
                           19990702
     JP 1999-188691
                      Α
                           19990702
     JP 1999-188692
                      Α
                           19990702
     JP 1999-188693
                     A
                           19990702
     A polycarbonate resin useful in making optical products is obtained by
AB
     polycondensation reaction of pentacyclopentadecanedimethanol, at least
one
     compd. selected from the group consisting of
tricyclo[5.2.1.02,6]decanedim
     ethanol, cyclohexane-1,4-dimethanol, decalin-2,6-dimethanol, and
     norbornanedimethahol, and a carbonic acid diester.
     pentacyclopentadecanedimethanol polycarbonate manuf;
ST
     tricyclodecanedimethanol polycarbonate manuf; cyclohexanedimethanol
     polycarbonate manuf; decalindimethanol polycarbonate manuf;
     norbornanedimethahol polycarbonate manuf
     Optical instruments
TΤ
        (cycloaliph. copolycarbonates, their prodn., and use)
     Polycarbonates, preparation
TΤ
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (cycloaliph. copolycarbonates, their prodn., and use)
                                  316189-09-0P 316189-10-3P
TΤ
     316189-07-8P
                   316189-08-9P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (cycloaliph. copolycarbonates, their prodn., and use)
```

(FILE 'HOME' ENTERED AT 13:18:03 ON 21 APR 2003)

	_FILE'REGISTRY-'-ENTERED-AT-13::18::17-ON-21-APR-2003
L1	1 S ZINC ACETATE/CN
L2	1 S ZINC BENZOATE/CN
L3	1 S ZINC ACETYLACETONATE/CN
L4	1 S ZIRCONIUM PHENOXIDE/CN
L5	1 S HAFNIUM ACETYLACETONATE/CN
L6	2 S 10026-11-6/RN OR 1071-76-7/RN
L7	2 S 17501-44-9/RN OR 301-04-2/RN
T8	2 S 77-58-7/RN OR 818-08-6/RN
L9	2 s 7772-99-8/RN or 7646-78-8/RN
L10	2 S 638-39-1/RN OR 2800-96-6/RN
L11	16481 S PC/PCT
	FILE 'CA' ENTERED AT 13:21:38 ON 21 APR 2003
L12	0 S C08G-64?/IC
L13	2682 S C08G-064?/IC
L14	24853 S L13 OR L11
L15	206 S L14 AND (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9
0	
L16	9 S L15 AND (YI OR YELLOW?)
L17	205 S L15 NOT 116
L18	197 S L15 NOT L16

```
L18 ANSWER 89 OF 197 CA COPYRIGHT 2003 ACS
ΑN
    122:315435 CA
TI _ Manufacture-of-hydrolysis-resistant polycarbonates
    Kuze, Shigeki; Okumura, Ryozo; Okamoto, Masaya; Takahashi, Seiji
IN
PΑ
     Idemitsu Petrochemical Co, Japan
SO
     Jpn. Kokai Tokkyo Koho, 12 pp.
     CODEN: JKXXAF
DT
    Patent
     Japanese
LΑ
IC
    ICM C08G064-30
     ICS C08G064-20
     35-5 (Chemistry of Synthetic High Polymers)
CC
     Section cross-reference(s): 67
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ____
                                          _____
     -----
     JP 07003004
                    A2
                           19950106
                                          JP 1993-148935
                                                           19930621
PΙ
PRAI JP 1993-148935
                           19930621
    The title polycarbonates are manufd. by transesterification of dihydroxy
     compds. with carbonic acid diesters using catalysts comprising active
     H-contg. N-contg. heterocyclic compds. and metal compds. Thus, 0.3 g
    bisphenol A and 0.56 g Ph2CO3 were polymd. using 2-hydroxypyridine and
    Mn(OAc)2 at 150.degree. for 1 h to give 100% polycarbonate.
    polycarbonate hydrolysis resistant; transesterification polymn catalyst
ST
    heterocycle metal; diol carbonate transesterification polymn catalyst
IT
    Polycarbonates, preparation
     RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
        (prepn. of hydrolysis-resistant polycarbonates by transesterification
        polymn. using N-contg. heterocyclic compds. and metal compds. as
        catalysts)
IT
     Heterocyclic compounds
     RL: CAT (Catalyst use); USES (Uses)
        (nitrogen, prepn. of hydrolysis-resistant polycarbonates by
        transesterification polymn. using N-contg. heterocyclic compds. and
        metal compds. as catalysts)
TΨ
     Polymerization catalysts
        (transesterification, prepn. of hydrolysis-resistant polycarbonates by
        transesterification polymn. using N-contg. heterocyclic compds. and
        metal compds. as catalysts)
     59-31-4, 2-Hydroxyquinoline 62-54-4, Calcium acetate
IT
                                                           71-48-7,
     Cobalt(II) acetate 142-08-5, 2(1H)-Pyridinone 142-72-3, Magnesium
     acetate 557-34-6, Zinc acetate 626-64-2, 4-Hydroxypyridine
     638-38-0, Manganese acetate 14024-48-7
                                              95011-82-8, Titanium phenoxide
     (Ti (OPh) 2)
    RL: CAT (Catalyst use); USES (Uses)
        (prepn. of hydrolysis-resistant polycarbonates by transesterification
        polymn. using N-contg. heterocyclic compds. and metal compds. as
        catalysts)
     24936-68-3P, preparation 25929-04-8P, Bisphenol
IT
    A-diphenyl carbonate copolymer
    RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
        (prepn. of hydrolysis-resistant polycarbonates by transesterification
        polymn. using N-contg. heterocyclic compds. and metal compds. as
```

catalysts)

```
L18 ANSWER 83 OF 197 CA COPYRIGHT 2003 ACS
AN
    123:257874 CA
  Manufacture of polycarbonates-with-good color tone
ΤI
IN
    Takahashi, Seiji; Okumura, Ryozo; Kuze, Shigeki
    Idemitsu Petrochemical Co, Japan
PΑ
    Jpn. Kokai Tokkyo Koho, 8 pp.
SO
    CODEN: JKXXAF
חת
    Patent
LΑ
    Japanese
IC
    ICM C08G064-30
    35-5 (Chemistry of Synthetic High Polymers)
CC
FAN.CNT 1
                    KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
     _____
                     ----
                           _____
    JP 07082365
                                          JP 1993-231605
                      A2
                           19950328
                                                           19930917
PΙ
PRAI JP 1993-231605
                           19930917
    The polycarbonates with high mech. strength are manufd. by
     self-condensation of divalent phenol bisaryl carbonates in the presence
ο£
    carboxylate salts as catalysts. Thus, 0.66 mol bisphenol A was treated
    with 1.454 mol Ph chloroformate to obtain bisphenol A bisphenyl
carbonate,
     0.001 mol of which was self-condensed in the presence of Ca(AcO)2 at
    270.degree. in vacuo for 3.5 h to give a polymer with wt. av. mol. wt.
     14,220.
    polycarbonate color tone condensation catalyst; carboxylate salt polymn
ST
    catalyst polycarbonate; strength mech polycarbonate condensation catalyst
    Polymerization catalysts
IT
        (carboxylate salt catalyst for manuf. of polycarbonates with good
color
        tone)
IT
    Monomers
     Polycarbonates, preparation
    RL: IMF (Industrial manufacture); PREP (Preparation)
        (carboxylate salt catalyst for manuf. of polycarbonates with good
color
        tone)
    20325-64-8P, Bisphenol A bisphenyl carbonate 24936-68-3P,
TT
    preparation
                 169283-52-7P
    RL: IMF (Industrial manufacture); PREP (Preparation)
        (carboxylate salt catalyst for manuf. of polycarbonates with good
color
       tone)
     62-54-4, Calcium acetate 142-72-3
                                          543-80-6, Barium acetate
IT
    557-34-6, Zinc acetate 2180-18-9, Manganese acetate
    RL: CAT (Catalyst use); USES (Uses)
        (polymn. catalysts; carboxylate salt catalyst for manuf. of
       polycarbonates with good color tone)
    80-05-7, Bisphenol A, reactions 1885-14-9, Phenyl chloroformate
TΤ
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (starting materials for monomers; carboxylate salt catalyst for manuf.
        of polycarbonates with good color tone)
```

```
ANSWER 6 OF 9 CA COPYRIGHT 2003 ACS
L16
ΑN
     125:168969 CA
TI -- Manufacture of polycarbonates containing phosphorus compounds for
     discoloration prevention
     Kuze, Shigeki; Suga, Koichi
IN
     Idemitsu Kosan Co, Japan
PΑ
SO
     Jpn. Kokai Tokkyo Koho, 12 pp.
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
IC
     ICM C08G064-30
     ICS C08G064-40; C08K005-49; C08L069-00
CC
     35-5 (Chemistry of Synthetic High Polymers)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
                            19960604
     JP 08143658
                       A2
                                           JP 1994-283532
                                                            19941117
PΙ
PRAI JP 1994-283532
                            19941117
os
    MARPAT 125:168969
     Dihydroxy compds. and diesters of carbonic acid are reacted in the
AB
     presence of transesterification catalysts. Certain phosphoric acid
     derivs. were added to the reaction when the reaction have gone
.gtoreg.90%
     to provide polycarbonates resistant to both discoloration and hydrolysis.
     A polycarbonate made from 22.8 g bisphenol A (BPA) and 23.5 g di-Ph
     carbonate and contg. 2.5 .times. 10-6 mol/BPA mol of pyrophosphoric acid
     was heated at 340.degree. under nitrogen for 30 min; the yellow
     index change .DELTA.YI was 7.3.
ST
     polycarbonate bisphenol pyrophosphoric acid additive; phosphoric
     pyrophosphoric acid additive polycarbonate; discoloration prevention
     polycarbonate phosphorus additive
IT
     Discoloration prevention
        (manuf. of polycarbonates contg. phosphorus compds. for discoloration
        prevention)
IT
     Polycarbonates, preparation
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); PREP (Preparation); USES (Uses)
        (manuf. of polycarbonates contg. phosphorus compds. for discoloration
        prevention)
IT
     Polyphosphoric acids
     RL: MOA (Modifier or additive use); USES (Uses)
        (manuf. of polycarbonates contg. phosphorus compds. for discoloration
        prevention)
                                75-59-2, Tetramethylammonium hydroxide
ΙT
     62-54-4, Calcium acetate
     557-34-6, Zinc acetate
                              638-38-0, Manganese acetate
                                                           1305-62-0,
     Calcium hydroxide, uses
     RL: CAT (Catalyst use); USES (Uses)
        (manuf. of polycarbonates contg. phosphorus compds. for discoloration
        prevention)
     24936-68-3P, preparation 25929-04-8P, Bisphenol
IT
     A-diphenyl carbonate copolymer
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); PREP (Preparation); USES (Uses)
        (manuf. of polycarbonates contg. phosphorus compds. for discoloration
        prevention)
IT
     1231-03-4, Pyrophosphoric acid, P,P'-diphenyl ester
                                                           1984-15-2,
     Methylenediphosphonic acid 2466-09-3, Pyrophosphoric acid
                                                                   3050-88-2,
     Tris(p-nonylphenyl) phosphite 7664-38-2, Phosphoric acid, uses
```

10380-08-2, Tripolyphosphoric acid
RL: MOA (Modifier or additive use); USES (Uses)
(manuf. of polycarbonates contg. phosphorus compds. for discoloration prevention)

```
L18 ANSWER 88 OF 197 CA COPYRIGHT 2003 ACS
AN
     123:10272 CA
_TI__ Manufacture of polycarbonates ______
IN
     Kuze, Shigeki
     Idemitsu Petrochemical Co., Ltd., Japan
PA
SO
     PCT Int. Appl., 32 pp.
     CODEN: PIXXD2
DΤ
     Patent
LΑ
     Japanese
IC
     ICM C08G064-30
     35-5 (Chemistry of Synthetic High Polymers)
CC
FAN.CNT 1
                    KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
     _____
                      ____
                            _____
                                           _____
                            19950216
                                           WO 1994-JP1303
                                                            19940805
     WO 9504770
                      A1
PΙ
         W: US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     JP 07053705 A2 19950228
                                     JP 1993-214800
                                                            19930809
     JP 07070306
                       A2
                            19950314
                                           JP 1993-246133
                                                            19930907
     JP 1993-246133
PRAI JP 1993-214800
                            19930809
                            19930907
     Polycarbonates are manufd. by the transesterification of a dihydroxy
AB
     compd. and a carbonic diester using a catalyst including an active
     hydrogen-contg. nitrogen-contg. heterocyclic compd., a metallic compd.,
     and optionally a nitrogen-contg. basic org. compd. The manufg. process
     includes a pre-treatment of the dihydroxy compd. or the diester with the
     catalyst and the following polymn. The obtained polycarbonate is
     colorless and resistant to hydrolysis.
     polycarbonate manuf catalyst transesterification
ST
IT
     Polycarbonates, preparation
     RL: IMF (Industrial manufacture); PREP (Preparation)
         (manuf. of polycarbonates)
     Polymerization
IT
     Polymerization catalysts
         (transesterification, manuf. of polycarbonates)
ΙT
     59-31-4, 2-Hydroxyquinoline 71-48-7, Cobalt acetate
                                                             75-59-2,
     Tetramethylammonium hydroxide 102-86-3, Trihexylamine 142-08-5,
     2-Hydroxypyridine 142-72-3, Magnesium acetate 557-34-6, Zinc acetate 626-64-2, 4-Hydroxypyridine 638-38-0, Manganese acetate
     1122-58-3, N,N-Dimethyl-4-aminopyridine 2052-49-5, Tetrabutylammonium
     hydroxide 16883-45-7, Tetramethylammonium tetrahydroborate
33725-74-5,
     Tetrabutylammonium tetrahydroborate
     RL: CAT (Catalyst use); USES (Uses)
         (manuf. of polycarbonates)
ΙT
     24936-68-3P, preparation 25929-04-8P, Bisphenol
     A-diphenyl carbonate copolymer
     RL: IMF (Industrial manufacture); PREP (Preparation)
         (manuf. of polycarbonates)
```